AF/2155

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT	: Carel J.L. Van Driel		
SERIAL NO.	: 09/341,085	EXAMINER	: Thu Ha T. Nguyen
FILED	: July 2, 1999	ART UNIT	: 2155
FOR	: COMMUNICATION SYSTEM WITH IMPROVED ACCESS NETWORK		

APPEAL BRIEF TRANSMITTAL LETTER

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Appellants respectfully submit three copies of an Appeal Brief For Appellants that includes an Appendix with the pending claims. The Appeal Brief is now due on January 30, 2006 since the due date of January 28, 2006 fell on a Saturday.

Appellants enclose a check in the amount of $170.00 (Current amount for an Appeal Brief $500.00 less $330.00 paid when filing the Appeal Brief on August 4, 2004) covering the requisite Government Fee.

Should the Examiner deem that there are any issues which may be best resolved by telephone communication, kindly telephone Applicants undersigned representative at the number listed below.

Respectfully submitted,
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Steve Cha, Reg. No. 44,069
(Name of Registered Rep.)

(Signature and Date)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

In re the Application

Inventor	:	**Carel J. L. Van Driel**
Application No.	:	**09/341,085**
Filed	:	**July 2, 1999**
For	:	**COMMUNICATION SYSTEM WITH IMPROVED ACCESS**

APPEAL BRIEF

On Appeal from Group Art Unit 2155

Dan Piotrowski
Registration No. 42,079

Date: January 30, 2006

By: Steve Cha
Attorney for Applicant
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Steve Cha, Reg. No. 44,069
(Name of Registered Rep.)

(Signature and Date)

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I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the present application, U.S. Philips Corporation, and not the party named in the above caption.

II. RELATED APPEALS AND INTERFERENCES

With regard to identifying by number and filing date all other appeals or interferences known to Appellant which will directly effect or be directly affected by or have a bearing on the Board's decision in this appeal, Appellant is not aware of any such appeals or interferences.

III. STATUS OF CLAIMS

Claims 1 and 3-20 are pending, are "previously presented," stand finally rejected, and form the subject matter of the present appeal. Claim 2 is canceled without prejudice.

IV. STATUS OF AMENDMENTS

The Amendment after the Final Office Action filed November 28, 2005 has not been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention pertains to a network switch 4 connecting an access network 1 to a core network 2 (FIG. 1), and is directed to relieving the switch of the burden of operating based on the specific configuration of the access network (page 1, lines 19-27). The access network 1 of the present invention provides an access node switch 8 that interfaces with the network switch 4 and relieves the network switch of the

above-mentioned burden (page 1, lines 19-27; page 2, lines 9-12; FIG. 6, ref. nos. 124-126). This allows for a non-dedicated network switch 4, which reduces overall complexity of the system (page 1, lines 19-27). An access node includes an access node switch 8 and a plurality of network control nodes or "network control elements" 3, 12, 5, each of the latter residing within a respective service area 21, 23, 25 (page 3, lines 26-31). Each network control node 3 has a network control switch 43 connected to the access node switch 8 (page 2, lines 18-19), and, in particular, has a network control node router that is coupled to an access node router (page 10, line 23; page 12, line 9). A network control element includes the network control switch 43 and channel cluster modules 31, 33, 35 to which it is connected. The channel cluster modules 31, 33, 35, in turn, are connected to a transmission network, and, more specifically, each module connects to a respective sub-network 7 of the transmission network. The sub-network 7 may be a Hybrid Coax Fiber (HFC) network (page 4, lines 1-15). The HFC network 7 is connected to a plurality of network terminations (NT) 11. Each of the NTs 11 is connected to a plurality of terminals 13, 15, 17 (page 4, lines 16-20, FIG. 1, sub-network 9 and extending broken lines).

Referring to FIG. 2, the access node switch 8 reads the VPI field of a packet routed from the network switch 4 (page 5, line 14), that field indicating the service area and frequency modulator for that packet (page 5, lines 5-7). Accordingly, the modulators 16, 22, 26 modulate onto different carrier frequencies. Each modulator 16, 22, 26 pertaining to a respective channel cluster module 25, 27, 29 and to the carrier frequency assigned to that module (page 5, lines 31-32). The output of the modulators 16, 22, 26 is combined and transmitted by the respective HFC network 28 for forwarding to each

network termination (NT) 30, 32 within the service area. The NT decodes only that part of the signal that is on the carrier frequency assigned to the NT (page 5, line 34 to page 6, line 11). That carrier frequency was selected by the network control switch 100 (page 5, lines 19-22). In doing so, the network control switch 100 read the last seven bits (page 6, lines 14-15: "128 carrier frequencies) of the VPI_C field in the incoming packet. The packet arrived at the network control switch by means of a selection made by the access node switch 8 (page 5, lines 15-17), which read merely the first 5 bits (page 6, line 14: "32 service areas) of the VPI_C field. Accordingly, the access node switch 8 controls all of the network specific switching without having to know a carrier frequency allocated to a terminal coupled to a sub-network.

In one aspect, a terminal of the plural terminals 34, 36, 38 includes signaling means for transparently exchanging network layer control information with the network switch 4 (page 2, lines 26-31; FIG. 6, ref. no. 120).

In another aspect, the network switch 4 includes proxy signaling means for deriving network layer control information from session layer and/or transport layer information exchanged between a terminal 34, 36, 38 and the network switch 4 (page 2, lines 26-31; FIG. 6, ref. no. 128; page 10, lines 18-27).

In yet another aspect, the network switch 4 is connected to an external network (FIG. 6, ref. nos. 122, 127), and is configured to set up a connection between said external network and said access node for a call by sending respective set-up messages to said external network (FIG. 6, ref. no. 122) and said access node (FIG. 6, ref. no. 124, first arrow) in response to receipt, at said network node, of a request transmitted

by one of the plural terminals by a transparent connection to said network switch (FIG. 6, ref. no. 120).

In a further aspect, the access node 8, in response to receiving the respective set-up message (FIG. 6, ref. no. 124, first arrow), reserves resources for the call and subsequently submits a set-up message downstream toward said one of the plural terminals (FIG. 6, ref. no. 124, second arrow).

In an additional aspect, the access node switch 8 receives, from the network switch 4, a packet having a field that identifies a network control element of said network control elements and a carrier frequency of the respective carrier frequencies (page 6, line 29: "part 35"), part of said field being replaced (page 5, line 23: "replace") with an identifier of a route from said network control element to a destination terminal of said packet, said packet being transmitting with its field partly replaced for modulation of content of said packet onto the identified carrier frequency (FIG. 2, ref. nos. 101, 16).

VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1 and 3-20 stand invalidly rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 5,619,500 to Hiekali in view of U.S. Patent No. 5,910,954 to Bronstein et al. ("Bronstein") and U.S. Patent No. 5,426,636 to Hiller et al. ("Hiller").

VII. ARGUMENT

Rejection of claims 1, 3, 4 and 7

Claim 1 recites:

> A communication system comprising:
> a plurality of terminals that are connected to an access network; and
> said access network, having a transmission network, and an access node connecting said transmission network to a non-dedicated network switch,

> said access node including an access node switch coupled to said network switch, and further including a plurality of network control elements, said network control elements each including a network control switch and a plurality of channel cluster modules, wherein the channel cluster modules are each arranged for transmitting downstream signals on one, respective carrier frequency, said transmission network comprising a plurality of sub-networks correspondingly coupled to said network control elements and to the plural terminals, said access node switch controlling all of the access-network-specific switching without said access node switch having to know a carrier frequency allocated to a terminal coupled to a sub-network of the plural sub-networks

Firstly, Hiekali fails to disclose or suggest "a non-dedicated network switch."

For each of the connecting ATM gateways 302-1, . . . 302-N, the Hiekali network switch 301 (col. 2, line 9: "ATM network switch") presumably must know which of the plurality of incoming connections (col. 3, lines 47: "two T3 connections") to route messages over. The Hiekali network switch 301 accordingly appears to be dedicated to its connecting ATM gateways 302-1, . . . 302-N.

The access node switch of the present invention, by contrast, relieves the network switch from knowing the details of the access network (specification, page 1, lines 19-27; page 2, lines 9-12).

It is accordingly unclear to the instant applicant in what sense the Office Action suggests that the Hiekali network switch 301 is "a non-dedicated network switch."

Secondly, as shown above, claim 1 recites, ". . . said network control elements each including a network control switch and a plurality of channel cluster modules, wherein the channel cluster modules are each arranged for transmitting downstream signals on one, respective carrier frequency. . ., said access node switch controlling all of the access-network-specific switching without said access node switch

having to know a carrier frequency allocated to a terminal coupled to a sub-network of the plural sub-networks."

Hiekali fails to disclose or suggest this feature of claim 1.

Hiekali, for example, fails to disclose or suggest "a carrier frequency allocated to a terminal."

Hiekali likewise fails to disclose or suggest, "channel cluster modules, wherein the channel cluster modules are each arranged for transmitting downstream signals on one, respective carrier frequency. . ."

Instead, Hiekali relates to time division multiplexing (TDM). None of the protocols found in Hiekali FIG. 3, for example, pertain to or suggest frequency division multiplexing (FDM).

Hiekali relates to phone lines (col. 1, line 15(16): "phone lines") and voice channels (col. 1, line 19: "voice channels"; col. 1, lines 63-65 and col. 2, line 64 to col. 3, line 2). For decades now, the conventional phone system, i.e., the public switched telephone network (PSTN), has been exclusively a TDM system. Although wave division multiplexing (WDM) is a form of FDM, it is only very recently that long distance lines in the PSTN have been implemented with WDM.

Hiekali fails to disclose or suggest FDM.

It would not have been obvious, at the time the invention was made, to modify Hiekali, based on Bronstein, Hiller and what was generally known to those of ordinary skill in the art, to feature, "". . . said network control elements each including a network control switch and a plurality of channel cluster modules, wherein the channel

cluster modules are each arranged for transmitting downstream signals on one, respective carrier frequency. . ."

The appellant is unable to find any disclosure or suggestion of FDM in Bronstein. Instead, Bronstein relates to an ATM switch 12, and ATM is a TDM technique.

The appellant is also unable to find any disclosure or suggestion of FDM in Hiller. Instead, Hiller relates to standard time division multiplexing of T1 lines (col. 27, line 41: "time multiplexed switch"; col. 40, line 6: "time slots", line 8: multiplexed DS0 bit streams").

The combination of references the Office Action proposes accordingly fails to disclose, suggest or feature the following aspect of claim 1:

> said network control elements each including a network control switch and a plurality of channel cluster modules, wherein the channel cluster modules are each arranged for transmitting downstream signals on one, respective carrier frequency. . ., said access node switch controlling all of the access-network-specific switching without said access node switch having to know a carrier frequency allocated to a terminal coupled to a sub-network of the plural sub-networks

Thirdly, it is unclear in what manner and by what motivation the Office Action proposes to combine the references. There is no apparent motivation for making the proposed Hiekali/Bronstein combination, let alone the Hiekali/Bronstein/Hiller combination.

While Hiekali is designed for efficiency (col. 4, line 21(22): "utilizes the unused channels"), high-speed (col. 2, line 10: "high speed") operation, utilization of off-the-shelf (col. 8, line 8: "off the shelf"), standard components and reduction of cost through simplicity (col. 8, lines 4-5), Bronstein is designed for flexible reconfiguration of

routing paths at the cost of added complexity and overhead (col. 4, line 40" "LAN emulation header"; col. 5, line 37: "arbiter"; col.. 6, line 14: "bridging and aging"; col. 8, lines 30-38).

Notably, the Bronstein network switch 10 shares a significant amount of common functionality with Hiekali SIMs and NIMs, and therefore cannot merely be tacked on as a front-end or back-end to the Hiekali ATM gateway. Accordingly, it is unclear how the two references would be integrated to achieve a practical embodiment, and, if integrated, how the resulting combination would not change the principle of operation of the primary reference. Since the proposed modification would change the principle of operation of the primary reference, the combination is non-obvious.

As to the first point raised above, the Office Action suggests that Hiekali discloses a non-dedicated network switch (page 4, first paragraph, first sentence), and cites to the Hiekali specification, figures and claims.

However, the appellant is unable to see how any portion of the citations supports the proposition being advanced by the Office Action.

As to the second point raised above, the Office Action cites, in the first paragraph on page 5, to several drawings and the specification of Hiller.

However, the appellant is unable to see how any portion of the citations supports the proposition being advanced by the Office Action.

Notably, more in-depth commentary on the position taken by the Office Action is somewhat hindered by the failure of the Office Action to specifically identify what in the references corresponds to the terms and expression appearing in claim 1.

As to the third point raised above, the Office Action is non-specific as to how it envisions combining the references, and cites efficiency (page 4, last paragraph) and flexibility (page 5, first paragraph) as motivation for combining references.

The appellant submits that the cited motivation, like the citations to where claim features exist in the references, lacks specificity.

For at least all of the above reasons, the proposed combination of prior art would not have been obvious, and, moreover, would not meet all of the limitations of the invention as recited in claim1.

Claims 3 and 4 depend from claim 1 which has been shown to be patentable over the applied references, and are likewise deemed to distinguish patentably over the applied references.

Claim 7 recites:

> An access node connectable to a transmission network, and to a non-dedicated network switch, the access node comprising:
> an access node switch; and
> a plurality of network control elements coupled to said access node switch, said access node switch being connectable to said network switch, wherein a network control element comprises a network control switch and a plurality of channel cluster modules, in that the channel cluster modules are arranged for transmitting downstream signals on one, respective carrier frequency and are connectable, correspondingly to sub-networks of said transmission network, and the access node switch controls all of the access-network-specific switching without said access switch having to know a carrier frequency allocated to a terminal coupled to a sub-network of said sub-networks

Claim 7 recites the same above-quoted aspects and is likewise deemed to be non-obvious over the cited references.

Rejection of claims 10, 14, 15 and 20

As to the second point raised above, with regard to a "carrier frequency allocated to a terminal," claims 10-15 and 20 do not recite this.

However, as to the first point raised above, with regard to the "non-dedicated network switch," claims 10-15 and 20 recite this feature.

Also, as to the third point raised above, with regard to lack of clarity as to the manner and with what motivation the references are being combined, this too applies to claims 10-15 and 20.

Claims 10-15 and 20 are accordingly believed to be separately patentable and distinguish patentably over the combination of references the Office Action proposes.

Rejection of claim 11

Claim 11 depends from claim 10 which has been shown to be patentable and is likewise deemed to be patentable.

However, claim 11 is, in addition, separately patentable due to it recitation, ". . . a carrier frequency allocated to said terminal."

This aspect of claim 11 pertains to the second point raised above.

For at least the above reasons, claim 11 is deemed to distinguish patentably over the applied references.

Rejection of claim 12

Claim 12 depends from claim 10 which has been shown to be patentable and is likewise deemed to be patentable.

However, claim 12 is, in addition, separately patentable due to it recitation, ". . . each of the network control switches being configured for switching said signal onto the respective one of predetermined carrier frequencies."

As in the separately patentable aspect of claim 11 mentioned above, this immediately above quoted aspect of claim 12 pertains to the second point raised above.

For at least the above reasons, claim 12 is deemed to distinguish patentably over the applied references.

Rejection of claim 13

Claim 13 depends from claim 10 which has been shown to be patentable and is likewise deemed to be patentable.

However, claim 13 is, in addition, separately patentable due to it recitation, ". . . each of the plural channel cluster modules being arranged for transmitting downstream on a respective, single carrier frequency."

As in the separately patentable aspects of claims 11 and 12 mentioned above, this immediately above quoted aspect of claim 13 pertains to the second point raised above.

For at least the above reasons, claim 13 is deemed to distinguish patentably over the applied references.

Rejection of claim 5

Claim 5 depends from claim 1 and is deemed to be patentable at least due to its dependency.

However, in addition, claim 5 is separately patentable by means of reciting, ". . . a terminal of the plural terminals comprises signaling means for exchanging network layer control information with said network switch."

Hiekali fails to disclose or suggest this aspect of claim 5.

In Hiekali, exchange of network layer control information occurs presumably by conventional transmission of a set-up message from switch A to adjacent switch B (present specification, FIG. 6, message 122).

The appellant is unable to see how claim 5 could be construed so that said "terminal" is adjacent to "said network switch."

Hiekali fails to disclose or suggest, ". . . a terminal of the plural terminals comprises signaling means for exchanging network layer control information with said network switch."

The Office Action cites to Hiekali, but the cited portion does not seem to advance the position of the Office Action.

For at least the above reasons, the combination of references the Office Action proposes fails to render obvious the present invention as recited in claim 5.

Rejection of claim 16

Claim 16 depends from claim 10 and is deemed to be patentable over the combination of references the Office Action cites for at least this reason.

Claim 16, in addition, is separately patentable due to its recitation, ". . . a terminal of the plural terminals comprises signaling means for exchanging layer control information with said network switch, said control information being exchanged transparently between the signaling terminal and said network switch."

Claim 16 is therefore deemed to be patentable over the combination the Office Action proposes at least for the same reasons set forth above with respect to the language specific to dependent claim 5.

In addition, claim 16 is deemed to be separately patentable by virtue of the ". . . control information being exchanged transparently between the signaling terminal and said network switch."

Hiekali fails to disclose this aspect of claim 16.

The Office Action cites to passages and drawings in Hiller, but the appellant is unable to find support in the citations for the proposition the Office Action is advancing.

For at least the above reasons, claim 16 is believed to distinguish patentably over the applied references.

Rejection of claim 6

Claim 6 depends from claim 1 and is deemed to be patentable at least due to its dependency.

In addition, claim 6 is separately patentable, due to its recitation, "said network switch comprises proxy signaling means for deriving network layer control information from session layer and/or transport layer information exchanged between a terminal and said network switch."

Hiekali fails to disclose or suggest this aspect of claim 6.

The Office Action cites to Hiekali, but the citations do not appear to support the proposition the Office Action is advancing.

For at least the above reasons, claim 6 is believed to distinguish patentably over the applied references.

Rejection of claim 17

Claim 17 depends from claim 10, and is deemed to distinguish patentably over the combination of references the Office Action cites at least for the reasons set forth above with regard to claim 10

Claim 17 is, in addition, separately patentable, because claim 17 recites, ". . . an access network that includes said access node and said transmission network, wherein said network switch comprises a proxy signaling function for deriving network layer control information from at least one of session layer and transport layer information exchanged, over said access network, between a terminal of the plural terminals and said network switch."

Hiekali fails to disclose or suggest this aspect of claim 17.

The Office Action cites to Hiekali, but the citations do not appear to support the proposition the Office Action is advancing.

For at least the above reasons, claim 17 is deemed to distinguish patentably over the applied references.

Rejection of claims 8 and 9

Claim 8 depends from claim 1, and is deemed patentable over the combination the Office Action cites at least due to its dependency.

Claim 8 is deemed to be, in addition, separately patentable due to its recitation:

> said access node switch receives, from said network switch, a packet having a field that identifies a network control element of said network

> control elements and a carrier frequency of the respective carrier frequencies, part of said field being replaced with an identifier of a route from said network control element to a destination terminal of said packet, said packet being transmitting with its field partly replaced for modulation of content of said packet onto the identified carrier frequency

Hiekali fails to disclose or suggest this aspect of claim 8.

The Office Action cites to FIGs. 8-10 and 14-18 in Hiller.

However, as mentioned above with regard to claim 1, Hiller relates to TDM, not to FDM. In fact, the Office Action's own citation to FIGs. 14 and 15, which use the labels "TIME SLOTS," suggests the inapplicability of Hiller.

The appellant submits that neither these drawings, nor any part of Hiller or any of the other applied references, alone or in combination, discloses or suggest the above-quoted aspect of claim 8.

The language particular to claim 9 is similar to that of claim 8, and the points discussed above with regard to claim 8 apply equally to claim 9.

For at least the above reasons, claim 8 and 9 are believed to distinguish patentably over the applied references.

Rejection of claim 18

Claim 18 depends from claim 10 which has been shown to be patentable over the applied references and is likewise deemed to be patentable.

Claim 18 is, in addition, separately patentable due to its recitation:

> The system of claim 15, further including said network switch, wherein said network switch is connected to an external network, and is configured to set up a connection between said external network and said access node for a call by sending respective set-up messages to said external network and said access node in response to receipt, at said network node, of a request transmitted by one of the plural terminals by a transparent connection to said network switch

Hiekali fails to disclose or suggest this aspect of claim 18.

The Office Action cites to Hiller for this aspect.

However, the passages the Office Action cites do not bear any hint of such a protocol as underlined in the above quotation.

For at least the above reasons, claim 18 is deemed to distinguish patentably over the applied references.

Rejection of claim 19

Claim 19 depends from claim 18 and is deemed patentable over the applied references at least due to its dependency.

In addition, claim 19 is deemed to be separately patentable due to its recitation, ". . . said access node, in response to receiving the respective set-up message, reserves resources for the call and subsequently submits a set-up message downstream toward said one of the plural terminals."

Hiekali fails to disclose or suggest this aspect of the invention as recited in claim 19.

The Office Action cites to Hiller, but the cited passages bear no hint of what is underlined above in the quotation from claim 19.

For at least the above reasons, claim 19 is patentable over the applied references.

In view of the above analysis, it is respectfully submitted that the referenced teachings, whether taken individually or in combination, fail to anticipate or render obvious the subject matter of any of the present claims. Therefore, reversal of all outstanding grounds of rejection is respectfully solicited.

Respectfully submitted,
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Registration No. 42,079

Date: January 30, 2006

By: Steve Cha
Attorney for Applicant
Registration No. 44,069

VIII. CLAIMS APPENDIX

1. (previously presented) A communication system comprising:

a plurality of terminals that are connected to an access network; and

said access network, having a transmission network, and an access node connecting said transmission network to a non-dedicated network switch, said access node including an access node switch coupled to said network switch, and further including a plurality of network control elements, said network control elements each including a network control switch and a plurality of channel cluster modules, wherein the channel cluster modules are each arranged for transmitting downstream signals on one, respective carrier frequency, said transmission network comprising a plurality of sub-networks correspondingly coupled to said network control elements and to the plural terminals, said access node switch controlling all of the access-network-specific switching without said access node switch having to know a carrier frequency allocated to a terminal coupled to a sub-network of the plural sub-networks.

2. (canceled)

3. (previously presented) The communication system according to claim 1, wherein the channel cluster modules comprise at least one downstream channel module.

4. (previously presented) The communication system according to claim 3, wherein the channel cluster module comprises an upstream channel module.

5. (previously presented) The communication system according to claim 1, wherein a terminal of the plural terminals comprises signaling means for exchanging network layer control information with said network switch.

6. (previously presented) The communication system according to claim 1, wherein said network switch comprises proxy signaling means for deriving network layer

control information from session layer and/or transport layer information exchanged between a terminal and said network switch.

7. (previously presented) An access node connectable to a transmission network, and to a non-dedicated network switch, the access node comprising:

an access node switch; and

a plurality of network control elements coupled to said access node switch, said access node switch being connectable to said network switch, wherein a network control element comprises a network control switch and a plurality of channel cluster modules, in that the channel cluster modules are arranged for transmitting downstream signals on one, respective carrier frequency and are connectable, correspondingly to sub-networks of said transmission network, and the access node switch controls all of the access-network-specific switching without said access switch having to know a carrier frequency allocated to a terminal coupled to a sub-network of said sub-networks.

8. (previously presented) The system of claim 1, wherein said access node switch receives, from said network switch, a packet having a field that identifies a network control element of said network control elements and a carrier frequency of the respective carrier frequencies, part of said field being replaced with an identifier of a route from said network control element to a destination terminal of said packet, said packet being transmitting with its field partly replaced for modulation of content of said packet onto the identified carrier frequency.

9. (previously presented) The access node of claim 7, wherein said access node switch receives, from said network switch, a packet having a field that identifies a network control element of said network control elements and a carrier frequency of the respective carrier frequencies, said part of said field being replaced with an identifier of a route from said network control element to a destination terminal of said packet, said packet being transmitting with its field partly replaced for modulation of content of said packet onto the identified carrier frequency.

10. (previously presented) A dedicated access node for connecting a non-dedicated network switch to a plurality of sub-networks of a transmission network, the plural sub-networks being respectively connectable to a plurality of terminals, said access node comprising:

an access node switch; and

a plurality of network control elements, said access node being configured to direct a signal from said network switch to a terminal of the plural terminals intended as a destination such that said network switch is relieved of knowing details of said access network that said network switch would otherwise need for directing said signal to the intended destination terminal.

11. (previously presented) The access node of claim 10, further including a network control switch and a translation unit, said network control switch configured for routing said signal received from said access node switch, via said translation unit, to said terminal, without said access node switch having to know a carrier frequency allocated to said terminal.

12. (previously presented) The access node of claim 11, wherein each of the plural network control elements includes a network control switch connecting the access node switch to respective ones of the plural terminals, said network control switch for routing being one of the network control switches for said connecting, each of the network control switches being configured for switching said signal onto the respective one of predetermined carrier frequencies.

13. (previously presented) The access node of claim 12, wherein a network control element of the plural network control elements further includes a plurality of channel cluster modules that connect the network control switch of said network control element to the corresponding said respective ones of the plural terminals, each of the plural channel cluster modules being arranged for transmitting downstream on a respective, single carrier frequency.

14. (previously presented) The access node of claim 10, wherein said details are such that said network switch would have to be dedicated if not for said access node being configured to direct said signal from said network switch to said terminal.

15. (previously presented) A communication system comprising the access node, the transmission network and the plural terminals of claim 10.

16. (previously presented) The system of claim 15, wherein a terminal of the plural terminals comprises signaling means for exchanging layer control information with said network switch, said control information being exchanged transparently between the signaling terminal and said network switch.

17. (previously presented) The system of claim 15, further comprising an access network that includes said access node and said transmission network, wherein said network switch comprises a proxy signaling function for deriving network layer control information from at least one of session layer and transport layer information exchanged, over said access network, between a terminal of the plural terminals and said network switch.

18. (previously presented) The system of claim 15, further including said network switch, wherein said network switch is connected to an external network, and is configured to set up a connection between said external network and said access node for a call by sending respective set-up messages to said external network and said access node in response to receipt, at said network node, of a request transmitted by one of the plural terminals by a transparent connection to said network switch.

19. (previously presented) The system of claim 18, wherein said access node, in response to receiving the respective set-up message, reserves resources for the call and subsequently submits a set-up message downstream toward said one of the plural terminals.

20. (previously presented) A method for configuring a communication system, comprising:

providing a transmission network;

providing a non-dedicated network switch;

connecting, by means of a dedicated access node, said network switch to the transmission network, said access node including an access node switch and a plurality of network control elements;

connecting, correspondingly, a plurality of sub-networks to the plural network control elements; and

connecting, respectively, a plurality of terminals to the plural sub-networks, said access node being configured to direct a signal from said network switch to a terminal of the plural terminals intended as a destination, such that said network switch is relieved of knowing details of said access network that said network switch would otherwise need for directing said signal to the intended destination terminal.

IX. EVIDENCE APPENDIX

The appellant is not aware of any evidence.

X. RELATED PROCEEDING APPENDIX

The appellant is not aware of any proceedings with regard to section II above.